Winter Operations: TALPA

TALPA, or Takeoff and Landing Performance Assessment, is a huge, multi-disciplinary effort consisting of government and industry subject matter experts. The cornerstone of TALPA is a Runway Condition Assessment Matrix, or RCAM. What the RCAM seeks to do is tie in runway contaminants, an aircraft's performance data, and an aircraft's braking capability into one area, and it does that through a series of codes -- 0, 1, 2, 3, 4, 5, 6. What the RCAM will allow is for users and operators to use those codes to help them form their Landing Performance Assessments.

TALPA originated because of a runway excursion. In 2005, a Boeing 737 was attempting to land during inclement weather at Chicago Midway. It overran the departure end of the runway, went through a blast fence, went through an airport fence, and ultimately struck vehicles. And because of that, an aviation rule-making committee was formed, and the recommendations, the efforts, the subgroups that came of that is ultimately what is known as TALPA, or Takeoff and Landing Performance Assessment. And this effort is a huge effort that will ultimately reduce runway excursion risk. After the accident, the investigation revealed certain areas that needed improvement, such as a standardized methodology and procedure for performance assessments at time of arrival, given actual reporting conditions. Also, a means to correlate an aircraft's braking capability with the actual runway surface conditions at the time. And also standardizing an additional safety margin, given a wet or contaminated runway.

Some things that you can currently see that came out of the TALPA efforts are field condition NOTAMs, or FICONs. These NOTAMs are an easy way for pilots and other users to easily assess the runway's surface condition. Something that you'll see in the future in regard to the TALPA efforts are that we are revising FAA policy and guidance, such as FAA Orders and Advisory Circulars, to help standardize terminology and standardize aircraft performance data requirements. All this will ultimately help reduce runway excursion risk.